NWS EHB 6−503
AF TO 31P1−4−108−6
FAA TI 6345.1 V4
NAVY EM400−AM−MOO−010

REVISION NO. 2

TECHNICAL MANUAL

INSPECTION, LUBRICATION, AND MAINTENANCE REQUIREMENTS MANUAL

DOPPLER METEOROLOGICAL RADAR
WSR−88D

PARAMAX CORPORATION
(Manual Prepared by the Titan Corporation/environmental Services Division)
CONTRACT 50−DMNW−8−00032

PUBLISHED UNDER AUTHORITY OF THE SECRETARIES OF
COMMERCE, THE AIR FORCE, THE NAVY, AND TRANSPORTATION

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INTRODUCTION

1. This manual contains complete requirements for accomplishing scheduled maintenance on this communication, electronic, and meteorological (C−E−M) equipment during its entire service life. It establishes inspection, accessory replacement, depot level, or inspect and repair as necessary (IRAN), and base−level repair requirements and restrictions. The requirements prescribed by this manual are primarily those which are technical in nature and the conditions listed are intended to direct attention to known problem areas where defects or malfunctions would prevent the items from performing their designed functions within prescribed limits. These requirements are developed for new C−E−M equipment through maintenance engineering and comparison of similar installations or in−service C−E−M equipment, by continually evaluating the performance of the equipment, results of scheduled maintenance, and through study of factual operating data for the primary use of the C−E−M equipment. The interval between the accomplishment of a requirement is intended to be the longest period of time that an item or component can safely operate without an inspection or observation. When the C−E−M equipment is operated in other than the primary purpose, or major use class, the necessary requirements have been adjusted accordingly, and the requirements identified as to class of operation. These requirements and inspection intervals are the maximum and should never be exceeded. Local conditions (type of missions, special utilization, geographical locations, etc.) may dictate more frequent inspection, replacement, or more thorough inspections. Therefore, local maintenance personnel have the prerogative to increase the frequency or scope of any requirements, and are expected to exercise this prerogative.

2. This manual may pertain to part, or all types and series, of a model of C−E−M equipment and may, therefore, contain requirements applicable to specific equipment that is not installed on individual C−E−M equipment. When this situation is encountered, those requirements that are not applicable should be disregarded.

3. The inspections prescribed by this manual will be accomplished at specified periods by organizational activities with assistance provided by intermediate maintenance activities and specialized repair activities, when required. Compliance with the provisions of this manual is required to assure that latent defects are discovered and corrected before a malfunction or serious trouble results.

INTRODUCTION − Contd.

4. The inspection requirements are stated in such a manner as to establish what equipment is to be inspected, when it is to be inspected, and what conditions are to be sought. In scope, the requirements are designed to direct the attention of maintenance personnel to components and areas where defects may exist as a result of usage under normal operating conditions. They are not intended to provide coverage for routine cleaning, washing, etc., nor are they designed to lead to the detection of isolated discrepancies that may occur on a one time basis, or discrepancies that are the result of carelessness, abuse, or poor maintenance practices. During accomplishment of the specific requirements directed by this manual, maintenance personnel should observe both the equipment being inspected and the components in the surrounding area for defects or irregularities not within the scope of the requirements. Inspections requiring the use of electrical power for accomplishment are identified by a commercial ”at” (@) symbol preceding the paragraph number for the inspections.

5. The replacement schedule directs replacement of items at a specific time whose failure would compromise safety or operation beyond reasonable limits or definitely cause a mission failure. Also considered are any high cost items whose failure would result in condemnation and any short life items which would require frequent occurrence of unscheduled maintenance. Items not listed will be known as ”condition items” and will be replaced only when necessary.

6. Section IV, Base−Level Repair Restrictions, lists items (by work unit code, nomenclature, FSC, and part number) for which base−level repair restrictions have been established, and describes the repairs which are not authorized.

7. The times in man−minutes for accomplishment of requirements in Sections I and II reflect only the time required for inspection or replacement. These times do not include time required to gain access to the equipment to facilitate accomplishment. Those factors (personnel and equipment shortages, lack of parts, adverse working conditions, and qualifications of personnel) which will directly affect the length of time for any scheduled maintenance are not included because they cannot be accurately predicted. Because the computer is limited to showing minutes at 999, when this figure is exceeded the additional minutes will be shown below the 999; thus 1500 will be shown as 999 followed by 501; 2000 will be shown as 999, 999, 002.

8. This manual does not contain detailed instructions for troubleshooting to find causes for malfunctions, nor does it contain instructions for repair, adjustment, or other means of rectifying defective conditions. Proper installation of a piece of equipment or accessory is not necessarily within the scope of this manual as adequacy and completeness of installation will have been determined at the time of installation. Applicable portions of the appropriate maintenance manual should be consulted to obtain “how to” maintenance instructions as they are beyond the scope of this manual.

INTRODUCTION − Contd.

9. For the purpose of clarification of terms used in this manual, the following definitions are given:

   a. Specified − Refers to a definite amount, operation, or limitation which has been established and is contained in applicable directives.

   b. Evidence − Is proof of a suspected or existing unsatisfactory condition.

   c. Secure − Means the component is properly mounted or attached to related equipment, including applicable safetying.

   d. Accessible − Is the term applied to equipment that may be inspected without further disassembly or removal of covers, closures, panels, etc., other than those required to accomplish the more specific requirements applicable to the particular inspections.

10. Changes and revisions to this manual will be published when necessary to add, delete, or change frequency or scope of requirements. Such changes will be based on factual data accumulated as a result of maintenance experience with the equipment. Recommendations proposing changes to this manual should be submitted to the U.S. Department of Commerce, National Weather Service, Radar Operations Center, Norman, OK 73072.

WORK AREAS

DOPPLER METEOROLOGICAL RADAR WSR−88D

100 Series Principal User Processor (PUP) Group Work Areas

- 110 PUP Data Processor UD41
- 120 System Console UD42
- 140 PUP Workstation (consists of the following)
  - Applications Terminal UD43
  - Graphic Tablet UD44
  - Graphics Display Assembly UD45
  - Audible Alarm UD46
- 190 Color Image Printer UD47
- 195 Color Video Monitor UD50

100 Series Open Principal User Processor (OPUP) Group Work Areas

- 110A Large OPUP UD80
- 120A Medium OPUP UD80
- 130A Small OPUP UD86
- 140A Display Workstation OPUP UD85

200 Series RDA/RPG Remote Access Terminal (RRRAT) Group Work Areas

- 240 RRRAT Workstation (consists of the following)
  - Monitor UD34A10
  - CPU UD34A9
  - Keyboard UD34A11

  Remote Maintenance Terminal (NWS Redundant Only) (consists of the following:
  - Monitor UD32A10
  - CPU UD32A9
  - Keyboard UD32A11

300 Series Radar Data Acquisition (RDA) Group Work Areas

- 301 RDA Electrical Equipment Shelter UD1 (consists of the following)
  - Radar Transmitter UD3/UD103
  - Radar Receiver UD4/UD104
  - RDA Data Processor UD5/UD105
  - Waveguide Pressurization Unit UD6/UD106
- 350 Antenna/Pedestal UD2
- 360 RDA Electrical Equipment Shelter (RPIE) UD7
- 370 RDA Site Generator Shelter UD10
- 380 Steel Tower UD11
- 390 Radome UD12

WORK AREAS − Cont.

400 Series Wideband Communications (WBC) Group Work Areas
- 410 MLOS Equipment Shelter (RPIE) UD13
- 420 Microwave Radio UD19
- 440 Microwave Radio UD39
- 470 Tower (Self−Supporting UD20) or (Guyed UD40)

500 Series Transition Power Maintenance Shelter (TPMS)
- 510 Transition Power Source UD62
- 515 TPS Controls, Sensors, Alarms, and Indicators
- 520 Environmental Control Unit (Except Type 3)
- 521 Unit Heater and Vent Heat Trace (Type 3 only)
- 530 Motorized Intake Damper (Type 3 only)
- 550 Exhaust Fan and Motorized Damper (Type 3 only)
- 560 Electric Toilet (Type 1, 4, 5, 7, and 9)
- 580 TPMS Security Sensors, Alarms, and Indicators
- 590 TPS Power Distribution Panels, Switches, and Fuses

700 Series Radar Product Generation (RPG) Group Work Areas
- 710 RPG Processor/Communications Assembly (RPGPCA) UD70/170
- 720 Master System Control Function (MSCF) UD71
- 730 Printer UD79
- 740 Remote Base Distribution System (BDDS) (consists of the following):
  - BDDS Terminal UD72
  - Remote LAN Switch UD73
  - Remote Router UD74A1

*Optional equipment not included with every configuration.

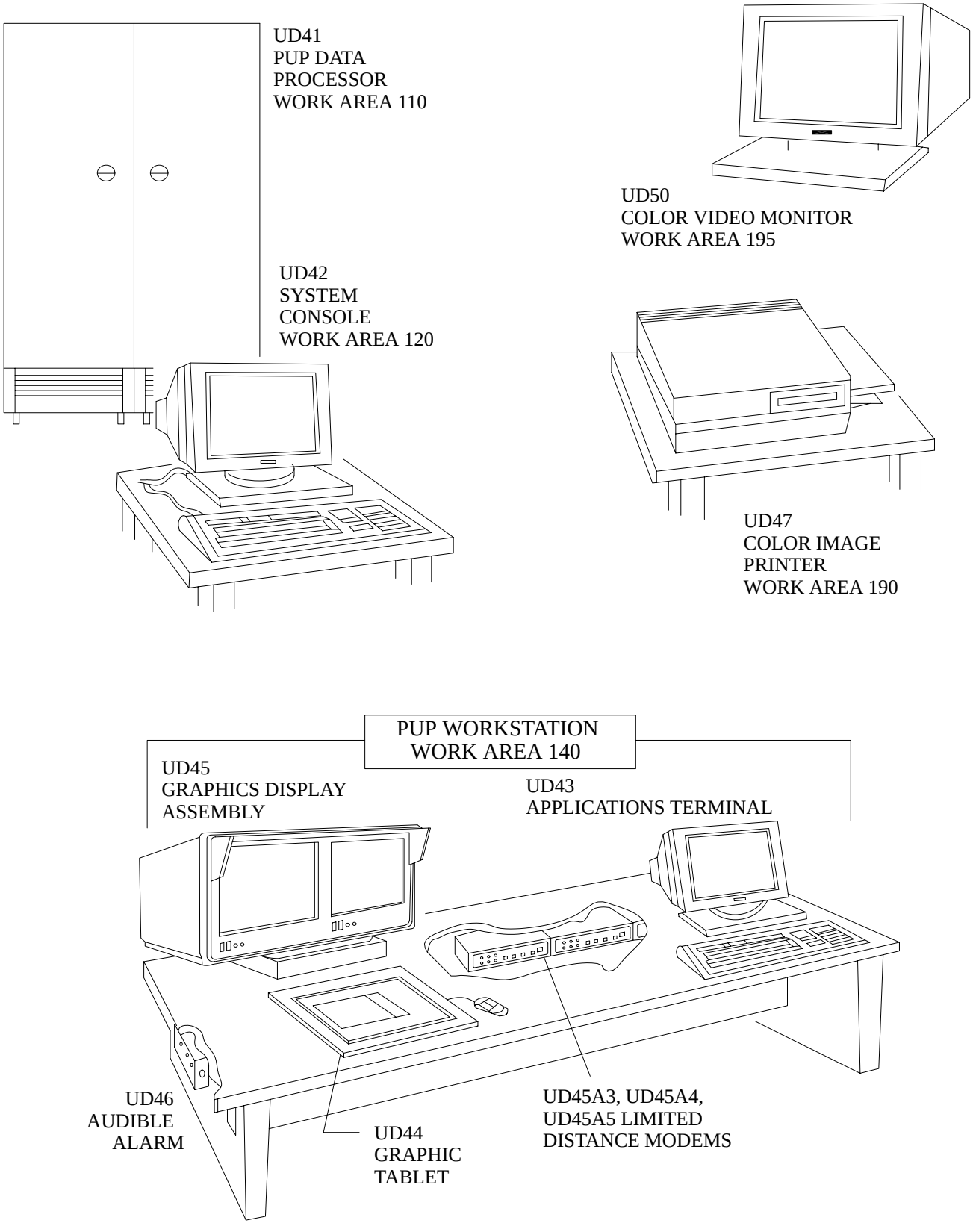
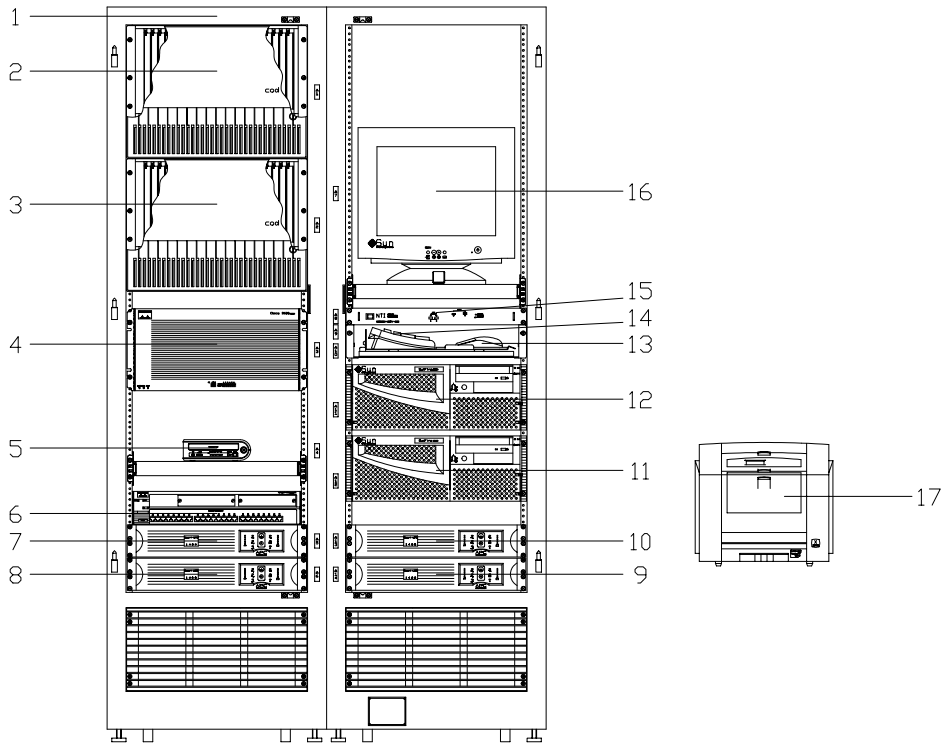


Figure 1−1. 100 Series Principal User Processor (PUP) Group Work Areas



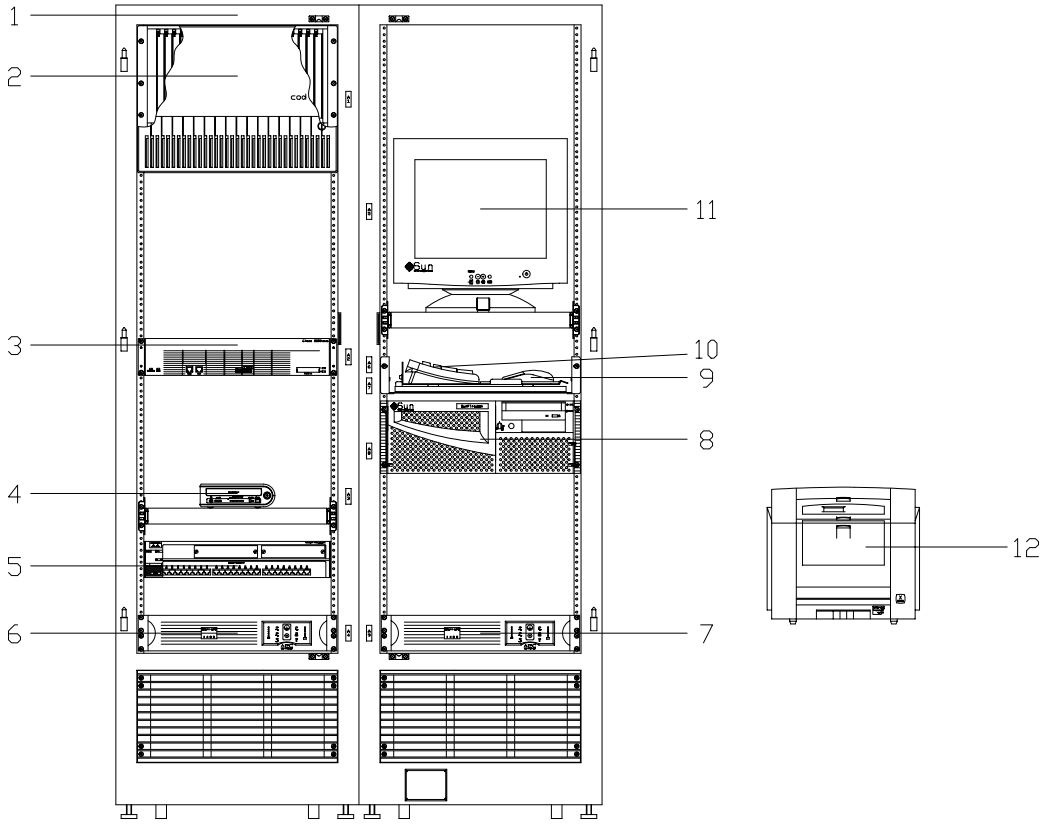
LARGE OPUP FRONT VIEW UD80
(DOORS REMOVED FOR CLARITY)

WORK AREA 110A
LARGE OPUP UD80

1. OPUP CABINET UD80
2. MODEM RACK A1
3. MODEM RACK A2
4. COMMUNICATION ROUTER (CISCO 3661) A3
5. ARCHIVE IV DEVICE A4
6. COMMUNICATION SWITCH A18
7. UPS A5
8. UPS A6
9. UPS A14
10. UPS A13
11. DISPLAY SERVER A12
12. DATABASE SERVER A11
13. MOUSE A10
14. KEYBOARD A9
15. KVM SWITCH A8
16. MONITOR A7
17. PRINTER A22

NX2427

Figure 1−2. 110A Series OPUP Group Work Area − Large OPUP UD80



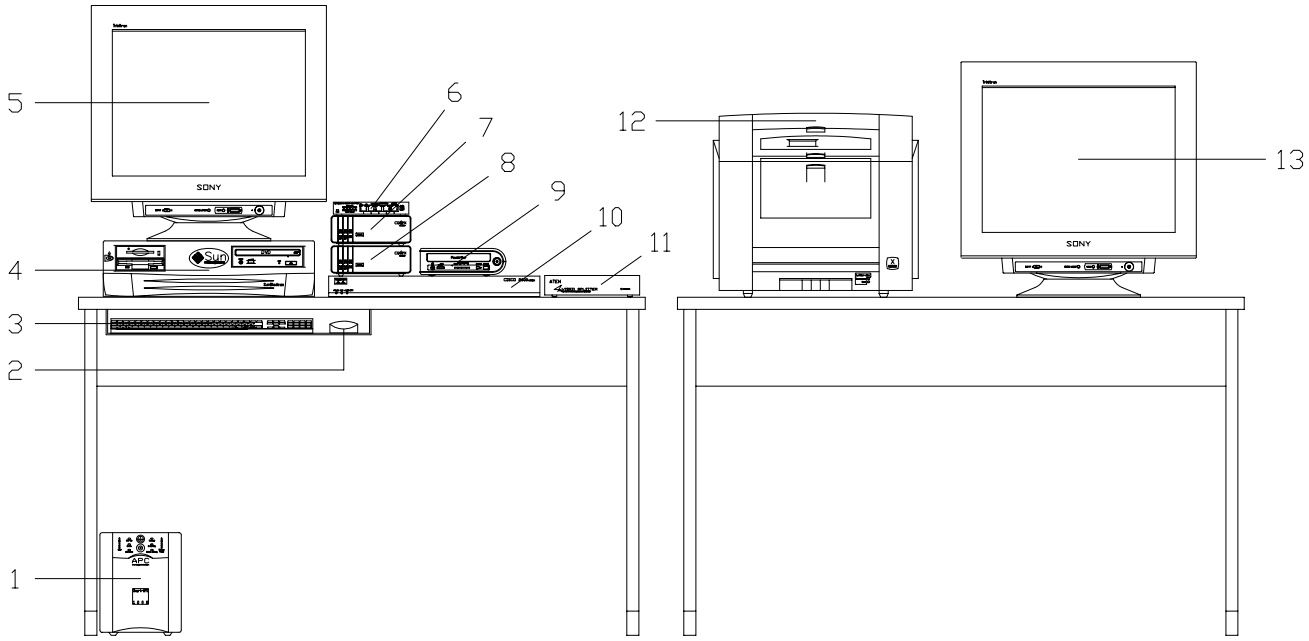
MEDIUM OPUP FRONT VIEW UD80
(DOORS REMOVED FOR CLARITY)

WORK AREA 120A
MEDIUM OPUP UD80

1. OPUP CABINET UD80
2. MODEM RACK A1
3. COMMUNICATION ROUTER (CISCO 3640) A3M
4. ARCHIVE IV DEVICE A4
5. COMMUNICATION SWITCH A18
6. UPS A6
7. UPS A14
8. SERVER A11
9. MOUSE A10
10. KEYBOARD A9
11. MONITOR A7
12. PRINTER A22

NX2428

Figure 1−3. 120A Series OPUP Group Work Area − Medium OPUP UD80



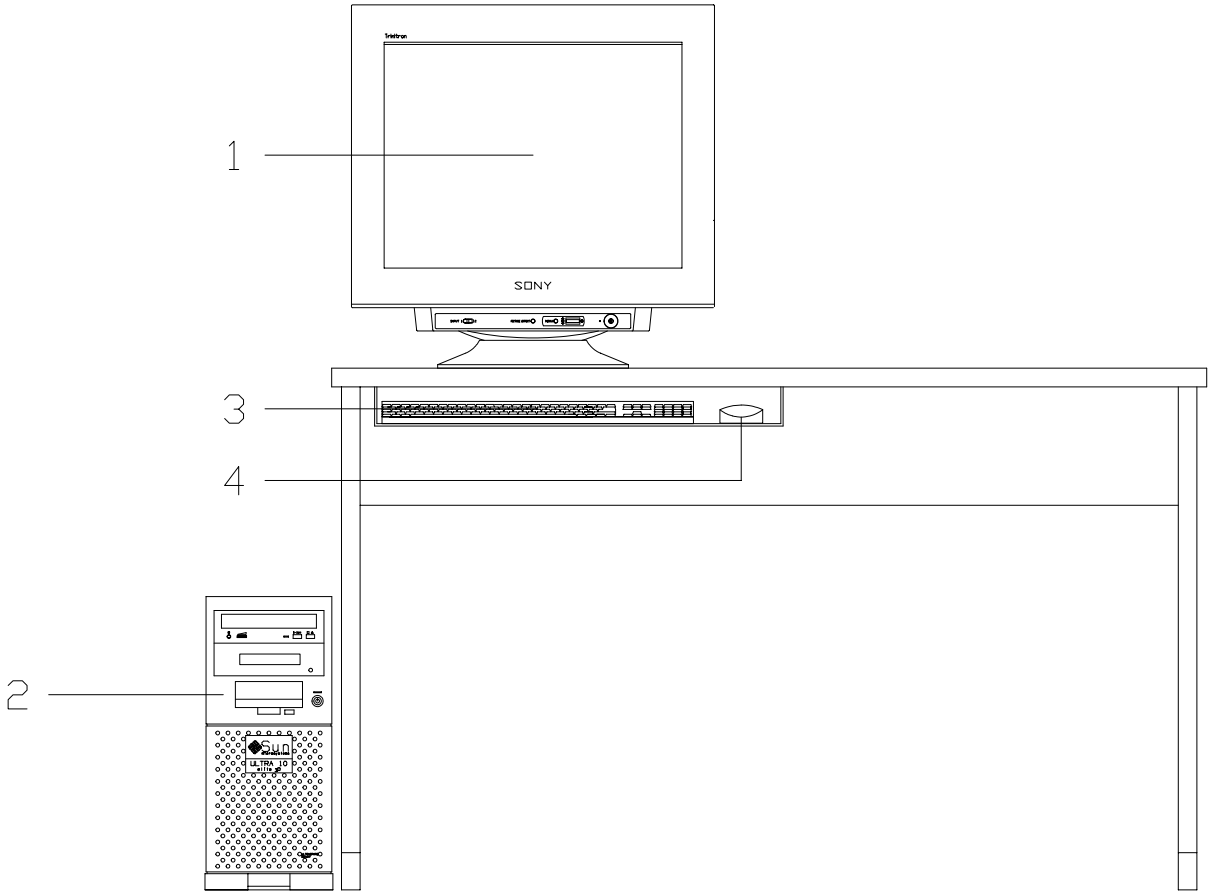
WORK AREA 130A
SMALL OPUP UD86

1. UPS A10
2. MOUSE A4
3. KEYBOARD A3
4. SERVER A2
5. MONITOR A1
6. SWITCH A5
7. SECONDARY EXTERNAL DEDICATED MODEM A13*
8. EXTERNAL DEDICATED MODEM A6
9. ARCHIVE IV DEVICE A7
10. COMMUNICATION ROUTER A8
11. VIDEO SPLITTER A9*
12. PRINTER A12*
13. SECONDARY MONITOR A11*

*SITE DEPENDENT

NX2430

Figure 1−4. 130A Series OPUP Group Work Area − Small OPUP UD86



WORK AREA 140A
LARGE/MEDIUM DISPLAY
WORKSTATION UD85

1. MONITOR A1
2. CPU PROCESSOR A2
3. KEYBOARD A3
4. MOUSE A4

NX2469

Figure 1−5. 104A Series OPUP Group Work Area − Large/Medium Display Workstation UD85

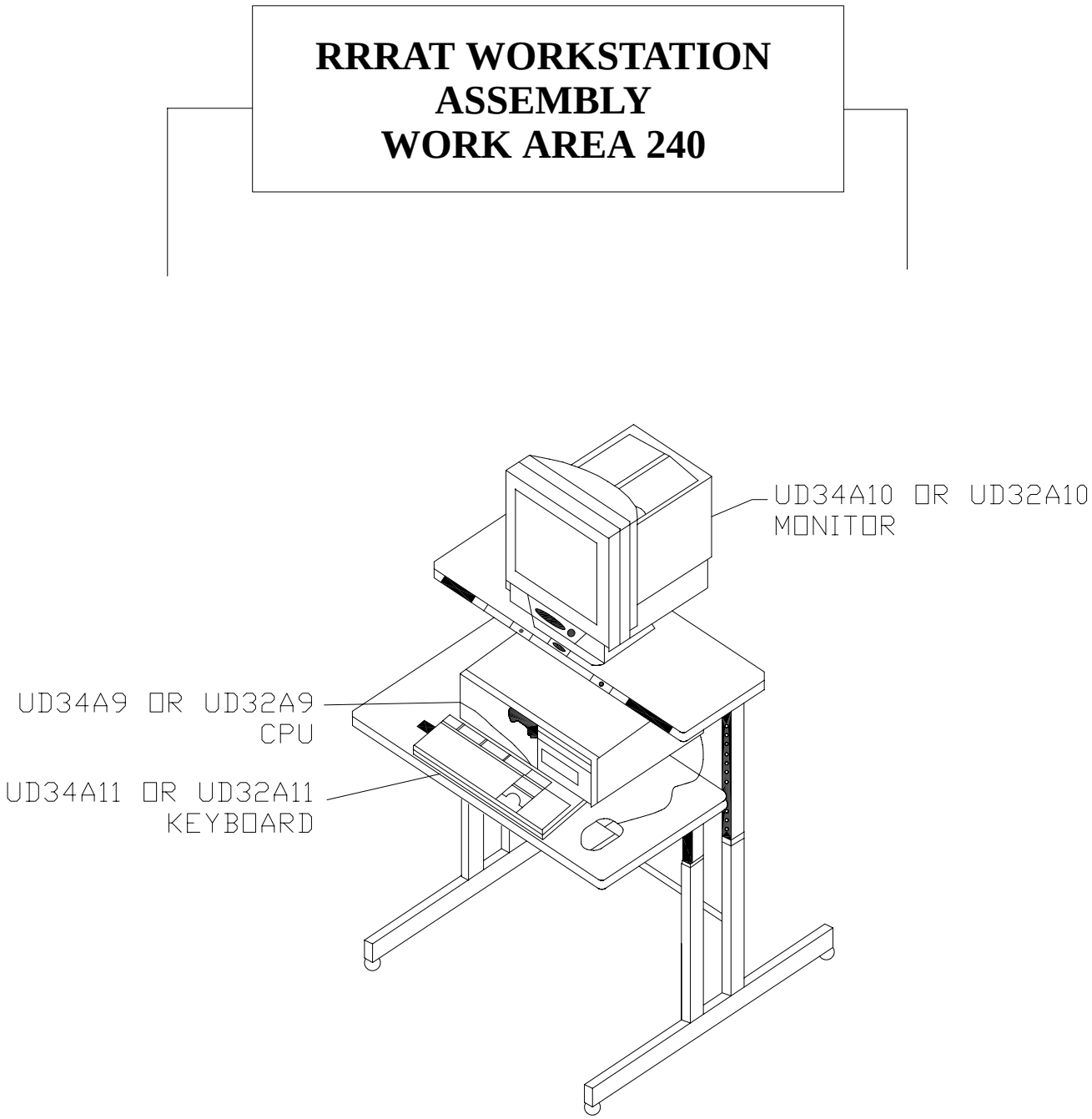


Figure 1−6. 200 Series RDA/RPG Remote Access Terminal (RRRAT) Group Work Areas

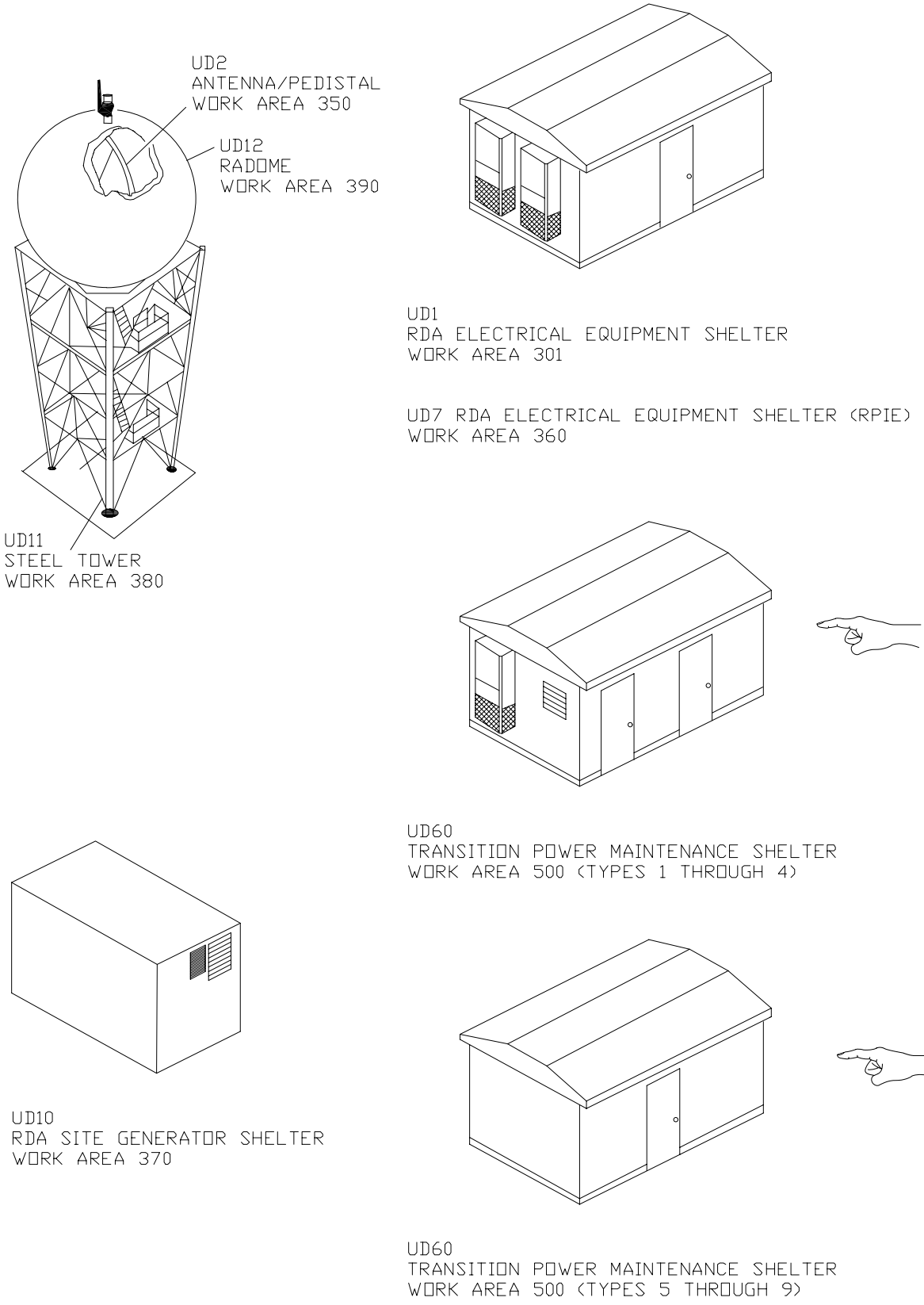


Figure 1−7. 300 and 500 Series Radar Data Acquisition (RDA) Group Work Areas with RPIE

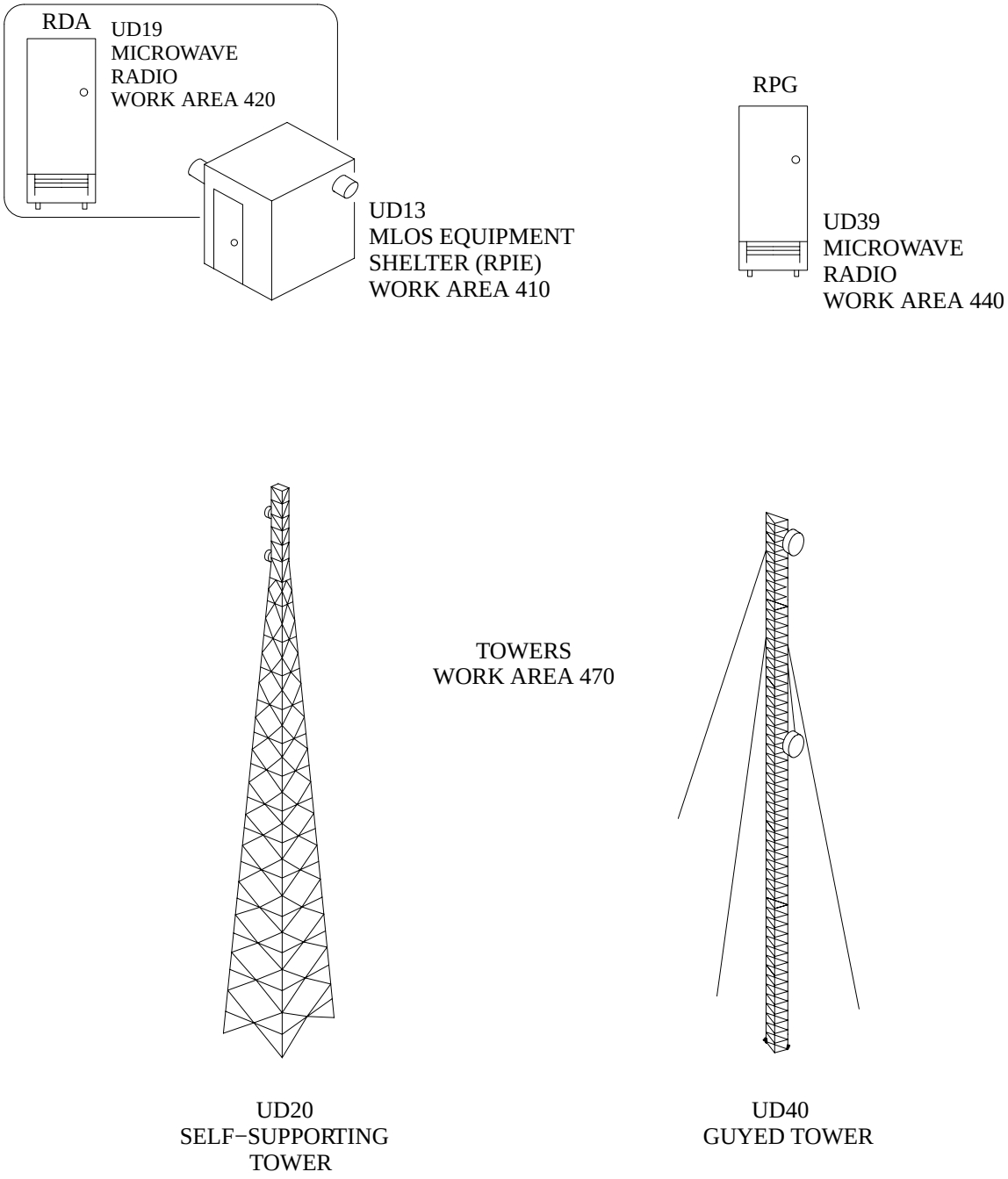
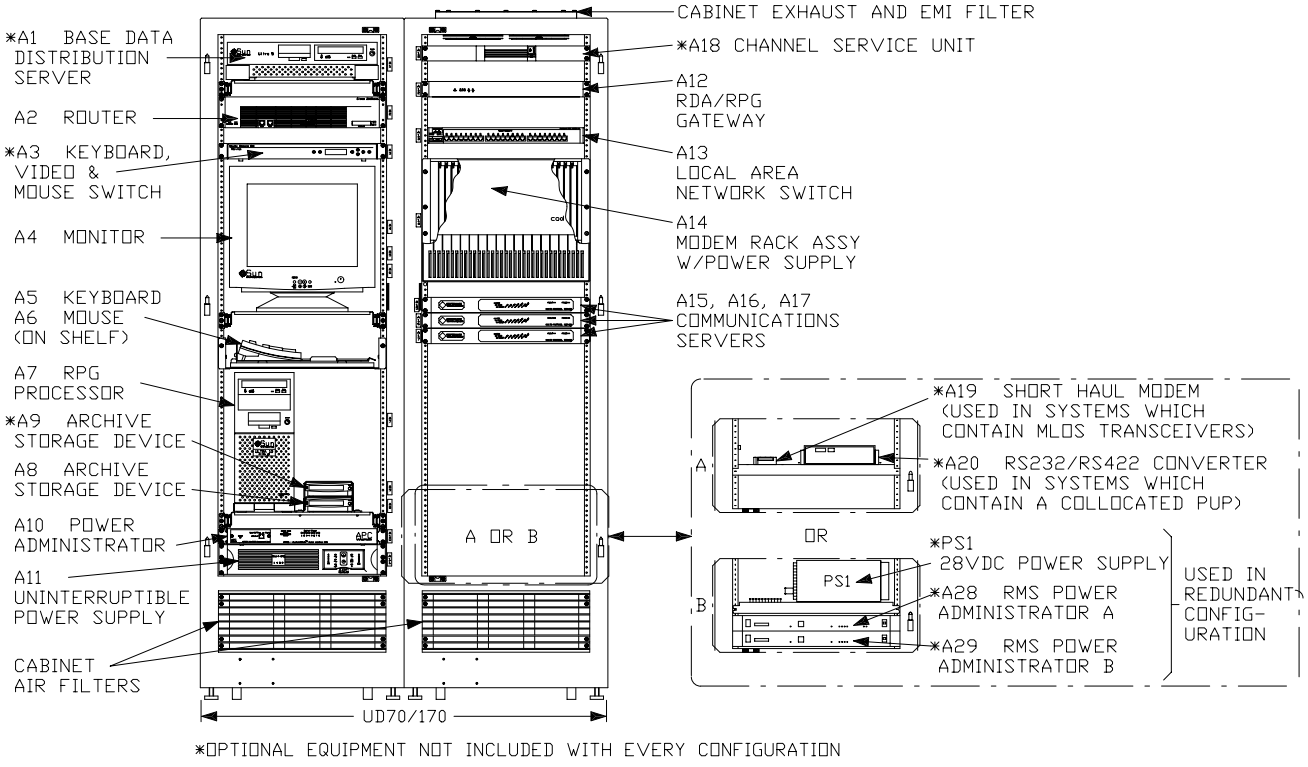


Figure 1−8. 400 Series Wideband Communications (WBC) Group Work Areas with RPIE



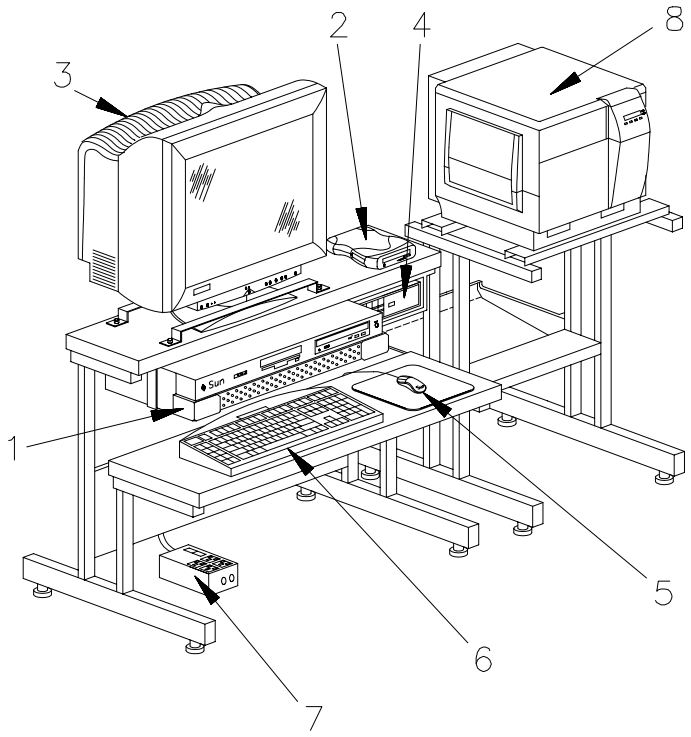
FRONT VIEW (DOORS REMOVED FOR CLARITY)

NX1778

WORK AREA 710

RPGPCA UD70/170

Figure 1−9. 700 Series Radar Product Generation (RPG) Group Work Area 710 (RPGPCA UD70/170)



WORK AREA 720
MSCF

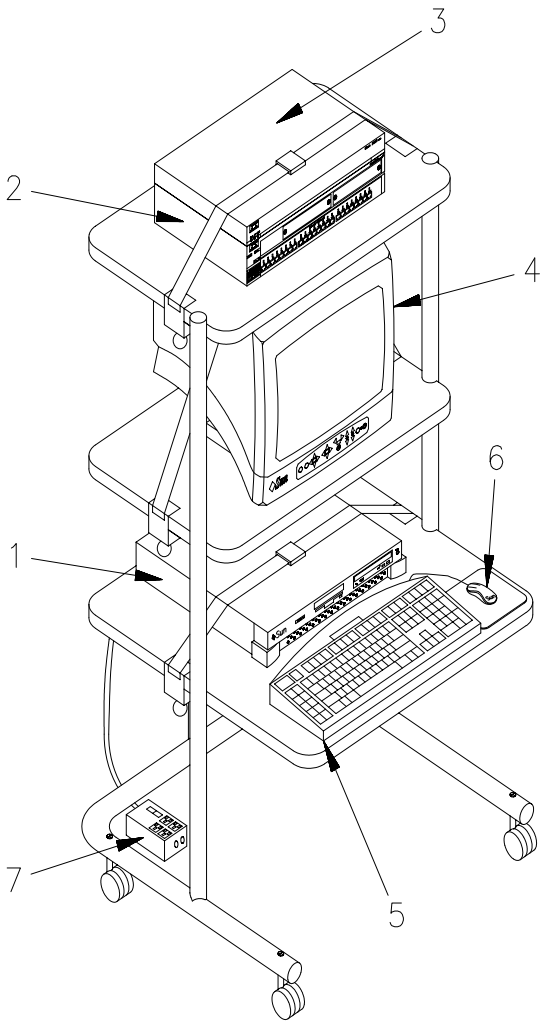
1. MSCF Processor (UD71A1)
2. Backup Storage Device (UD71A6)
3. Monitor (UD71A2)
4. Dedicated Port Modem (UD71A5) (DoD & FAA Only)
5. Mouse (UD71A4)
6. Keyboard (UD71A3)
7. Surge Suppressor (UD71E1)

WORK AREA 730
PRINTER

8. Printer (UD79A1)

NX1734

Figure 1−10. 700 Series Radar Product Generation (RPG) Group Work Area 720 and 730 (MSCF UD71 and Printer UD79)



Workstation Configuration Can Vary Between Sites

WORK AREA 740
Base Data Distribution Server (BDDS) Workstation*

1. Remote BDDS Processor (UD72A1)
2. Remote LAN Switch (UD73)
3. Remote Router (UD74A1)
4. Monitor (UD72A2)
5. Keyboard (UD72A3)
6. Mouse (UD72A4)
7. Surge Suppressor (UD72E1)

*Optional

NXI735

Figure 1−11. 700 Series Radar Product Generation (RPG) Group
Work Area 740 (Remote BDDS Workstation UD72, UD73, and UD74)

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART A

1 DAY (DAILY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the daily inspection is accomplished once each 24 hours. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work card will not appear in this section.

1 DAY (DAILY) INSPECTION

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART B

7 DAY (WEEKLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the daily inspection is accomplished once each 7 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work card will not appear in this section.

7 DAY (WEEKLY) INSPECTION

Work Card No.	*Para−graph*		*Work Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART C

28 DAY (MONTHLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the periodic inspection is accomplished once each 28 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work cards will not appear in this section.

28 DAY (MONTHLY) INSPECTION

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
1−001	@1	PUP Data Processor, SCSI Assembly Tape Drive (UD41A15); inspect and clean. (Reference NWS EHB 6−530)	002	110	2E0X1
1−002	@1	PUP Data Processor, Swing−Out Power Subsystem (UD41PS1); voltage check (Reference NWS EHB 6−530)	001	110	2E0X1
1−003	@1	PUP Workstation, Audible Alarm (UD46); operational check. (Reference NWS EHB 6−530)	001	140	2E0X1
1−004	@1	Color Image Printer (UD47); clean paper−pick rollers. (Reference NWS EHB 6−532)	011	190	2E0X1
1−101	@1	Large/Medium/Small OPUP (UD80 and UD86); system status check. (Reference NWS EHB 6−537 and NWS EHB 6−538)	010	110A 120A 130A 140A	2E0X1

28 DAY (MONTHLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
1−102	@1	Large/Medium OPUP UPS (UD80A5, A6, A13, and A14); battery check. (Reference NWS EHB 6−537)	002	110A 120A	2E0X1
1−103	@1	Small OPUP UPS (UD86A10); battery check. (Reference NWS EHB 6−538)	002	130A	2E0X1
1−104	@1	Large/Medium OPUP Modem Rack (UD80A1 and A2); power supply/fan check. (Reference NWS EHB 6−537)	002	110A 120A	2E0X1
1−105	@1	Large/Medium OPUP Server (UD80A11 and A12); power supply check. (Reference NWS EHB 6−537)	002	110A 120A	2E0X1
1−106	@1	Large OPUP Communication Router (UD80A3); power supply check. (Reference NWS EHB 6−537)	002	110A	2E0X1
2−001	@1	MSCF Workstation (UD71); perform system status check. (Reference NWS EHB 6−525)	010	720	2E0X1
2−002	@1	RDA Data Processor, SCSI Assembly Tape Drive (UD5A5/UD105A5); inspect and clean. (Reference NWS EHB 6−510)	002	301	2E0X1
2−003	@1	RDA Data Processor, RDA Clock/Calendar (UD5A12/UD105A12); check time. (Reference NWS EHB 6−510)	009	301	2E0X1
2−004	@1	RDA Electrical Equipment Shelter, Fire Detection System (UD7A5); inspect and test. (Reference NWS EHB 6−550 or NWS EHB 6−553 and EHB 6−551−4)	004	360	2E0X1
2−005	@1	RDA Data Processor (UD5/UD105), Level II Recorder (UD16); clean. (Reference NWS EHB 6−561)	020	301	2E0X1

28 DAY (MONTHLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−006	@1	RDA Site Generator Shelter, Auto Transfer Switch Assembly, Battery Charger (UD10A1A6); check. (Reference NWS EHB 6−550 or NWS EHB 6−553 and NWS EHB 6−552 for Kohler or NWS EHB 6−551−13 for Onan)	012	370	2E0X1
2−007	@1	RDA Site Generator Shelter, Auto Transfer Switch Assembly (UD10A1); test. (Reference NWS EHB 6−550 or NWS EHB 6−553 and NWS EHB 6−552 for Kohler Generators or NWS EHB 6−551−13 for Onan Generators)	006	370	2E0X1
2−008	@1	RDA Performance Data; Suncheck measurements. (Reference NWS EHB 6−510)	014	301	2E0X1
2−009	1	TPMS, Motorized Intake Damper (UD60A2A5) (Type 3 TPMS only); Filter and Vent Screen inspect and clean. (Reference NWS EHB 6−553)	015	530	2E0X1
2−010	1	TPMS, Environmental Control Unit (UD60A11/12/15 except Type 3), Transition Power Source (TPS) (UD62), and Battery Cabinet (UD63); inspect and clean. (Reference NWS EHB 6−550 or 6−553 and 6−554−6)	010	520	2E0X1
2−011	@1	RPGPCA UPS (UD70A11); verify self−test. (Reference NWS EHB 6−525)	007	710	2E0X1

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART D

56 DAY (BI−MONTHLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the periodic inspection is accomplished once each 56 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work cards will not appear in this section.

56 DAY (BI−MONTHLY) INSPECTION

Work Card No.	*Para−graph*	*Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART E

84 DAY (QUARTERLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the periodic inspection is accomplished once each 84 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work cards will not appear in this section.

84 DAY (QUARTERLY) INSPECTION

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−012	1	RDA Electrical Equipment Shelter, Motorized Damper Assembly (UD7A9/UD7A10 for UD3 and UD7A39/UD7A40 for UD103); inspect, clean, and test. (Reference NWS EHB 6−550 or NWS EHB 6−553)	030	360	2E0X1
2−013	1	RDA Electrical Equipment Shelter, Air Conditioner #1, Air Conditioner #2, and Air Conditioners with Economizers (UD7AC1 and UD7AC2); inspect, clean, and test. (Reference NWS EHB 6−551−1 or applicable COTS Manual)	045	360	2E0X1
2−014	1	TPMS, Environmental Control Unit (ECU) (UD60A11, A12, or A15); inspect, clean, and test. (Reference NWS EHB 6−554−6)	030	520	2E0X1

84 DAY (QUARTERLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−015	1	RDA Site Generator Shelter, Motorized Damper Assembly (UD10A3, UD10A4, UD10A5, and UD10A11); inspect, clean, and test. (Reference NWS EHB 6−550 or NWS EHB 6−553)	040	370	2E0X1
2−016	1	Steel Tower (UD11); inspect, clean, and test. (Reference NWS EHB 6−550 or NWS EHB 6−553)	035	380	2E0X1
2−017	1	Radome (UD12); inspect. (Reference NWS EHB 6−551−8)	012	390	2E0X1
2−018	@1	RDA Performance Data; CW Substitution Reflectivity Error; check. (Reference NWS EHB 6−510)	080	301	2E0X1
2−019	@1	RDA Performance Data, Minimum Discernible Signal; check. (Reference NWS EHB 6−510)	045	301	2E0X1
2−020	1	Antenna/Pedestal Slip Ring Assembly (UD2A1A2); inspect and clean. (Reference NWS EHB 6−510)	070	350	2E0X1
2−021	1	TPMS, Motorized Intake Damper (UD60A2A5) (Type 3 TPMS only); inspect and clean. (Reference NWS EHB 6−553)	030	530	2E0X1
2−022	1	TPMS, Exhaust Fan (UD60A2A3) and Motorized Damper (UD60A2A4) (Type 3 TPMS only); inspect and clean. (Reference NWS EHB 6−553)	030	550	2E0X1

SECTION I

SCHEDULED INSPECTION, SERVICING, AND LUBRICATION REQUIREMENTS

PART F

168 DAY (SEMI−ANNUALLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the periodic inspection is accomplished once each 168 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work cards will not appear in this section.

168 DAY (SEMI−ANNUALLY) INSPECTION

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
1−005	1	PUP Data Processor (UD41) Cabinet; inspect and clean. (Reference NWS EHB 6−530)	040	110	2E0X1
1−006	1	PUP Workstation, Applications Terminal (UD43), Graphic Tablet (UD44), Graphics Display Assembly (UD45), and System Console (UD42); inspect and clean. (Reference NWS EHB 6−530)	011	120 140	2E0X1
1−007	1	Color Video Monitor (UD50); inspect and clean. (Reference NWS EHB 6−530)	005	195	2E0X1
1−107	@1	Large/Medium OPUP Cabinet (UD80); inspect and clean. (Reference NWS EHB 6−537)	030	110A 120A	2E0X1
1−108	@1	Small OPUP area (UD86); inspect and clean. (Reference NWS EHB 6−538)	030	130A	2E0X1

168 DAY (SEMI−ANNUALLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
1−109	@1	Large/Medium/Small OPUP Printer (UD80A22/ UD86A12); inspect and clean. (Reference NWS EHB 6−537 and NWS EHB 6−538)	030	110A 120A 130A	2E0X1
1−110	@1	Large/Medium OPUP Display Workstation (UD85); inspect and clean. (Reference NWS EHB 6−537)	015	140A	2E0X1
2−023	1	RPG Processor/Communications Assembly (RPGPCA) (UD70/UD170); inspect and clean. (Reference NWS EHB 6−525)	030	710	2E0X1
2−024	1	RDA/RPG Remote Access Terminal (UD34) or Remote Maintenance Terminal (UD32) (NWS Redundant only); inspect and clean (Reference NWS EHB 6−525)	010	240	2E0X1
2−025	1	MSCF Workstation (UD71), Printer Workstation (UD79), and Remote BDDS Workstation (UD72/73/74); inspect and clean. (Reference NWS EHB 6−525)	020	720 730 740	2E0X1
2−026	@1	RDA Electrical Equipment Shelter, Radar Receiver (UD4/UD104) and RDA Data Processor (UD5/UD105) cabinets; inspect and clean. (Reference NWS EHB 6−510)	060	301	2E0X1
2−027	@1	Radar Transmitter (UD3/UD103); inspect, clean, and test. (Reference NWS EHB 6−510 and NWS EHB 6−511)	100	301	2E0X1
2−028	1	Antenna/Pedestal (UD2); inspect and clean, Radome Heaters (UD2HRX); inspect and clean, Azimuth Gearbox; oil change, and Azimuth Gearbox Oil Collection Bottle; inspect (Reference NWS EHB 6−510 and NWS EHB 6−513 or NWS EHB 6−514)	060	350	2E0X1

168 DAY (SEMI−ANNUALLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−029	@1	RDA Electrical Equipment Shelter, Fire Detection System (UD7A5); inspect, clean, and test. (Reference NWS EHB 6−550 or NWS EHB 6−553 and NWS EHB 6−551−4)	020	360	2E0X1
2−030	1	RDA Site Generator Shelter, Heater (UD10HR1); inspect and clean. (Reference NWS EHB 6−550 or NWS EHB 6−553)	030	370	2E0X1
2−031	1	RDA Site Generator Shelter, Auto Transfer Switch (UD10A1); inspect and clean. (Reference NWS EHB 6−552 (Kohler) or NWS EHB 6−551−13 (Onan))	030	370	2E0X1
2−032	1	MLOS Equipment Shelter (UD13) RPIE; inspect, clean, lubricate, and test. (Reference NWS EHB 6−545 and NWS EHB 6−550 or NWS EHB 6−553)	030	410	2E0X1
2−033	@1	Microwave Radio (UD19 and UD39); inspect, clean, and test. (Reference NWS EHB 6−545 and NWS EHB 6−541)	018	420 440	2E0X1
2−034	1	Antenna/Pedestal, Azimuth DC Servo Motor (UD2A1A3B1), and Elevation DC Servo Motor (UD2A1A1B1) motor brushes; inspect and clean. (Reference NWS EHB 6−513 for LPP sites or NWS EHB 6−514 for FSP sites)	025	350	2E0X1

SECTION I

SCHEDULED INSPECTION, SERVICING AND LUBRICATION REQUIREMENTS

PART G

336 DAY (ANNUALLY) INSPECTION

1. The maintenance officer will establish an appropriate schedule to assure the periodic inspection is accomplished once each 336 days. The inspection consists of checking the equipment by performing visual examination and will include requirements to assure the equipment is ready for operation, and no defect or maladjustment exists that could cause accidents or mission failure.

2. All the requirements listed herein are identical to those contained in the corresponding inspection work cards. The format provides a cross reference to the work card and paragraph number where the inspection is performed; therefore, paragraph numbers will not appear in consecutive sequence. Subparagraphs of work cards will not appear in this section.

336 DAY (ANNUALLY) INSPECTION

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−035	1	RDA Group (UD1, UD7, UD10, UD11, UD12, UD13, and UD60); system ground inspection. (Reference NWS EHB 6−510 and MIL−HDBK−419A Vol 2)	060	301 360 370 380 390 410 500	2E0X1
2−036	1	Radar Transmitter (UD3/UD103) Oil Dielectric Strength; test. (Reference NWS EHB 6−510 and NWS EHB 6−511)	024	301	2E0X1
2−037	@1	Waveguide Pressurization Unit (UD6/UD106); inspect, clean, and test. (Reference NWS EHB 6−510, NWS EHB 6−512, and NWS EHB 6−512−1)	020	301	2E0X1

336 DAY (ANNUALLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−038	1	Antenna/Pedestal (UD2); bolt torque and level inspection. (Reference NWS EHB 6−510 and NWS EHB 6−514 or NWS EHB 6−513)	030	350	2E0X1
2−039	1	Antenna/Pedestal (UD2) Elevation Bearings/ Output Pinion Bearings; lubricate, Counterweights; inspect, Elevation Gearbox; oil change, Azimuth Oil Reservoir; oil change, and Ladder; inspect. (Reference NWS EHB 6−510 and NWS EHB 6−513 or NWS EHB 6−514)	130	350	2E0X1
2−040	@1	RDA Site Generator Shelter, Thermal Detector (UD10A8); test. (Reference NWS EHB 6−550 or NWS EHB 6−553)	006	370	2E0X1
2−041	1	RDA Site Generator Shelter, Heater (UD10HR1) Fan Motor Bearings; lubricate. (Reference NWS EHB 6−550 or NWS EHB 6−553)	010	370	2E0X1
2−042	1	RDA Site Generator Shelter, Fuel Level Sensor(s) (UD10A6A1 and UD10A6A2 for redundant sites); check. (Reference NWS EHB 6−550 or NWS EHB 6−553)	045	370	2E0X1
2−043	1	Steel Tower (UD11), Radome Davit Crane and Outrigger Hoist Assembly; inspect, clean, and lubricate. (Reference NWS EHB 6−550 or NWS EHB 6−553)	030	390	2E0X1
2−044	@1	RDA Data Processor (UD5/UD105), Level II Recorder (UD16); clean. (Reference NWS EHB 6−561 and EHB 6−562)	015	301	2E0X1

336 DAY (ANNUALLY) INSPECTION Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−045	1	TPMS, Type 1 through 4 sites, Transition Power Source (TPS) (UD62) and Battery Cabinet (UD63); inspect and clean. (Reference NWS EHB 6−550 or NWS EHB 6−553 and EHB 6−554−5)	090	510	2E0X1
2−046	1	TPMS, Types 5, 6, 7, and 9 sites and TPS only (Type 8) sites, Transition Power Source (TPS) (UD62), Battery Cabinet (UD63), and Maintenance Bypass Module (MBM) (UD64); inspect and clean. (Reference NWS EHB 6−550 or NWS EHB 6−553 and NWS EHB 6−554−5)	090	510	2E0X1
2−047	@1	RDA Shelter, RF Radiation Leakage; check. (Reference NWS EHB 6−510 and NWS EHB 6−511)	015	301	2E0X1

SECTION II

SPECIAL INSPECTION AND MAINTENANCE REQUIREMENTS

PART A

CONDITIONAL INSPECTION, OR INSPECTION AFTER A SPECIFIC OCCURRENCE

This part contains requirements to be accomplished at the expiration of a specified number of equipment hours of operation, lapsed calendar time, or after the occurrence of a specific or unusual condition or incident. The inspection will be added to and accomplished at the next inspection. However, a requirement which represents a heavy workload and involves multiple installations may be accomplished in appropriate segments at consecutive inspections. The conditional requirements, when due, may require accomplishment as soon as possible after the occurrence of the condition or prior to further operation.

CONDITIONAL INSPECTIONS

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
1−008	@1	Color Graphic Printer (UD47); copy count. (Reference NWS EHB 6−530 and NWS EHB 6−532)	006	190	2E0X1
1−008	2	Color Graphic Printer (UD47); inspect, service, and clean. (Every 10,000 copies). (Reference NWS EHB 6−532)	060	190	2E0X1
1−008	3	Color Graphic Printer (UD47); inspect, service, and clean. (Every 20,000 copies) (Reference NWS EHB 6−532)	060	190	2E0X1
1−008	4	Color Graphic Printer (UD47); inspect, service, and clean. (Every 30,000 copies). (Reference NWS EHB 6−532)	060	190	2E0X1
1−008	5	Color Graphic Printer (UD47); inspect, service, and clean. (Every 40,000 copies). (Reference NWS EHB 6−532)	060	190	2E0X1
2−048	1	Radome (UD12), panel bolt torque and interior; inspect. (Reference NWS EHB 6−551−8)	050	390	2E0X1

CONDITIONAL INSPECTIONS Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−049	1	Generator Set (UD10M1/UD10G1) (Kohler Model 80ROZJ81/100REOZJ Standby Generator Set, with John Deere Model TO6059T/6068TF250 Diesel Engine); service in accordance with OEM | technical manuals. Maintenance schedule includes 8, 100, 250, 400, 600, and 1200 hour inspection, service, and lubrication intervals. (Reference NWS EHB 6−552)	N/A	370	2E0X1
2−050	1	Generator Set (UD10M1−1/UD10G1−1) (Onan Model 80DGDA 80KW Generator Set, with Cummins Model 6BT5.9G1 Diesel Engine); service in accordance with OEM technical manuals. Maintenance schedule includes; 8 hour inspection, 50, 100, 250, and 500 hour service intervals. (Reference NWS EHB 6−551−9, −10, −11, −12, and −13)	N/A	370	2E0X1
2−051	1	Whenever RDA Electrical Equipment Shelter (UD1), Antenna/Pedestal (UD2), RDA Electrical Equipment Shelter (RPIE) (UD7), RDA Site Generator Shelter (UD10), Steel Tower (UD11), Radome (UD12), MLOS Equipment Shelter (UD13) RPIE, or Transition Power Maintenance Shelter (UD60) have been subjected to: lightning strike, hail, heavy rain (over 2 inches per hour), or heavy wind (over 70 knots); inspect. (Reference NWS EHB 6−550 or NWS EHB 6−553)	418	300 350 360 370 380 390 400 410 500 720	2E0X1
2−052	1	TPMS, Electric Toilet (UD60A4) (Type 1, 4, 5, 7, and 9 TPMS only); inspect and clean blower wheel when blower becomes excessively noisy; inspect and clean ashpan as required. (Reference NWS EHB 6−550 or NWS EHB 6−553 and NWS EHB 6−554−3)	045	560	2E0X1

CONDITIONAL INSPECTIONS Contd.

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*
2−053	1	TPMS, Unit Heater (UD60A7 and A8) (Type 3 TPMS only); inspect, clean, and check operation prior to start of heating season. (Reference NWS EHB 6−553 and NWS EHB 6−554−4)	045	521	2E0X1
2−054	1	TPMS, Vent Heat Trace Cable (UD60A2A7) and Thermostat (UD60A2A7A1) (Type 3 TPMS only); inspect, clean, and check operation prior to winter. (Reference NWS EHB 6−553)	030	521	2E0X1
2−055	1	MSCF Color Printer (UD79A1); inspect and clean when experiencing frequent paper jams and/or receiving “Error 30”. (Reference NWS EHB 6−525)	020	730	2E0X1

SECTION II

SPECIAL INSPECTION AND MAINTENANCE REQUIREMENTS

PART B

ACCEPTANCE INSPECTION, CONDITIONS REQUIRING FUNCTIONAL CHECK

This section contains the conditions which require verification of maintenance performed by the accomplishment of a functional check and the inspection requirements that are to be accomplished to make the verification. The inspection requirements are those considered necessary to assure that the equipment is capable of accomplishing its mission. When a functional check is accomplished for verification of maintenance performed on a specific equipment or system, those inspection requirements not related to that specific equipment or systems should be disregarded.

CONDITIONS REQUIRING FUNCTIONAL CHECK OR SPECIAL INSPECTIONS

1. After a periodic or specific numbered phased inspection has been completed.
2. After applicable inspection has been completed when equipment is removed from extended storage or relocated to another operating location.
3. After major components have been replaced or removed for repairs and reinstalled.
4. After a major structural modification or repair is accomplished.
5. After extensive maintenance or repair is accomplished of such a scope that a test is determined to be necessary by the maintenance officer.

SECTION II

SPECIAL INSPECTION AND MAINTENANCE REQUIREMENTS

PART C

DEPOT LEVEL INSPECTION, OR INSPECT AND REPAIR AS NECESSARY (IRAN)

This part contains inspection and maintenance requirements which, due to their complexity, skill, tools, equipment, or facilities required, will be accomplished during depot level work (IRAN).

SPECIAL INSPECTIONS

Work Card No.	*Para−graph*	*Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE

SECTION III

TIME REPLACEMENT ITEMS

PART A

This section lists units of equipment that are to be replaced upon the accrual of a specific number of equipment hours of operation or a lapse of calendar time. Replacement means removal of the item and installation of a serviceable item in its place. The hourly and calendar requirements, when due, will be added to and be accomplished at the daily or periodic inspection, whichever is more appropriate. The conditional requirements, when due, may require accomplishment as soon as possible after the occurrence of the condition or prior to further operation.

REPLACEMENT SCHEDULE

Work Card No.	*Para−graph*		*Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE

SECTION IV

BASE−LEVEL REPAIR RESTRICTIONS

PART A

1. This section lists those items (by work unit code and noun) for which base level repair is authorized but contain some restrictions on the type of repair to be performed. All other repairs required to return the item to a serviceable condition will be accomplished at base level consistent with the authorizations for repair level contained in the appropriate illustrated parts breakdown manual.

2. The repair restriction contained in this section will be reviewed periodically by utilizing AFI 21−116 data and other maintenance and supply information to determine whether base−level repair authorizations can be extended.

3. For AFI 21−116 maintenance data reporting purpose, NRTS Code 1 (Repair not Authorized) will be used only when repairs required to make the item serviceable include one or more of the conditions listed in this section for that particular item.

REPAIR RESTRICTIONS

Work Card No.	*Para−graph*	*Minutes*	*Work Area*	*Mech Type*

NOT APPLICABLE